ABSTRACT OF THE DISCLOSURE

A branching point on a wire is detected in the layout results S101. A delay amount of a route with a dummy buffer being inserted on a wire subsequent to the branching point S102 and that of the route without a dummy buffer being inserted are then calculated S103. Based on the delay amounts, an insertion point at which a load-dividing buffer is to be inserted is determined S104. On condition that a load-dividing buffer is to be inserted at the insertion point, the drive capability of a driving cell preceding the insertion point is calculated so that timing constraints are satisfied S105. Then, after it is confirmed that a load-dividing buffer is insertable at the determined insertion point S106, processes of placing a load-dividing buffer, changing the drive capability of the driving cell, and changing wiring information are performed on the layout results S107.